

Lake Carr Lake Vegetation Index Results (8-30-2013)

The Lake Vegetation Index score for Lake Carr was 69, placing the lake's vegetative community in the healthy category.

The Lake Vegetation Index (LVI) is a multi-metric index that evaluates how closely a lake's plant community resembles one that would be expected in a condition of minimal human disturbance. It is based on a rapid field assessment of aquatic and wetland plants as indicators of various effects of human disturbance over time. Plants respond to physical disturbances such as introduction

of exotic species or lakeshore alterations, and chemical disturbance such as introduction of excess nutrients, particulates, or herbicides from the surrounding land uses.

The LVI method is performed from a boat, and involves dividing a lake into 12 units and identifying plants in 4 of the 12 units. Plants are identified in the selected unit by a visual boat "drive by" and also via a transect approach. The resulting data is used to calculate the LVI and is evaluated according to the scoring system in Table 1. County staff are available to discuss the information as desired.

TABLE 1. Category names, ranges of values for LVI, and example descriptions of biological conditions typically found for that category.

<i>Aquatic life use category</i>	<i>LVI Range</i>	<i>Description</i>
Exceptional	78–100	Nearly every plant present is a species native to Florida, invasive taxa typically not found. About 30% of taxa present are identified as sensitive to disturbance.
Healthy	43–77	About 85% of plant taxa are native to Florida; invasive taxa present. Sensitive taxa have declined to about 15%.
Impaired	0–42	About 70% of plant taxa are native to Florida. Invasive taxa may represent up to 33% of total taxa. Less than 10% of the taxa are sensitive.

Fifty-three plant species were found during the survey. The native species, fanwort (*Cabomba caroliniana*), coontail (*Ceratophyllum demersum*), fragrant waterlily (*Nymphaea odorata*) and leafy bladderwort (*Utricularia foliosa*) were the most dominant plants in the lake. Other native shoreline vegetation included; red maple (*Acer rubrum*), buttonbush (*Cephalanthus occidentalis*) and dotted smartweed (*Polygonum punctatum*).

Unfortunately, torpedo grass (*Panicum repens*) and water hyacinth (*Eichhornia crassipes*), both listed as Category I Invasive Exotics by the Florida Exotic Pest Control Council, are invasive exotics that are a concern in Lake Carr. Alligator weed (*Alternanthera philoxeroides*) was the only Category II Invasive Exotic found in the lake.

For a complete list of plants found during the LVI survey, please see Table 2.

TABLE 2. Scientific and common names of the plants identified during the Lake Carr LVI survey (8-30-13).

Scientific Name	Common Name
<i>Acer rubrum</i>	red maple
<i>Alternanthera philoxeroides(II)</i>	alligator weed
<i>Andropogon</i> sp.	broomsedge
<i>Azolla caroliniana</i>	mosquito fern
<i>Bacopa caroliniana</i>	lemon Bacopa
<i>Bidens laevis</i>	smooth beggartick
<i>Boehmeria cylindrica</i>	false nettle
<i>Brasenia schreberi</i>	watershield
<i>Cabomba caroliniana</i>	fanwort
<i>Cephalanthus occidentalis</i>	buttonbush
<i>Ceratophyllum demersum</i>	coontail
<i>Decodon verticillatus</i>	swamp loosestrife
<i>Dulichium arundinaceum</i>	three-way sedge
<i>Eichhornia crassipes (I)</i>	water hyacinth
<i>Eupatorium</i> sp.	Eupatorium
<i>Fuirena pumila</i>	dwarf umbrella sedge
<i>Habenaria repens</i>	water spider orchid
<i>Hydrocotyle</i> sp.	water pennywort
<i>Juncus effusus</i>	common rush
<i>Juncus marginatus</i>	grassleaf rush
<i>Leersia hexandra</i>	southern cutgrass
<i>Limnobium spongia</i>	frog's bit
<i>Liquidamber styraciflua</i>	American sweetgum
<i>Ludwigia arcuata</i>	needleleaf Ludwigia
<i>Ludwigia leptocarpa</i>	anglestem primrose willow
<i>Ludwigia sphaerocarpa</i>	globe-fruited primrose willow
<i>Myriophyllum heterophyllum</i>	twoleaf watermilfoil
<i>Myriophyllum pinnatum</i>	cutleaf watermilfoil
<i>Nelumbo lutea</i>	American lotus
<i>Nymphaea odorata</i>	fragrant waterlily
<i>Nymphoides aquatica</i>	banana lilly
<i>Panicum repens(I)</i>	torpedo grass
<i>Polygonum densiflorum</i>	denseflower knotweed
<i>Polygonum punctatum</i>	dotted smartweed
<i>Pontederia cordata</i>	pickerelweed
<i>Rhynchospora inundata</i>	narrowfruit horned beaksedge
<i>Ricciocarpus natans</i>	purple-fringed Riccia
<i>Saccharum giganteum</i>	sugarcane plumegrass
<i>Sacciolepis striata</i>	American cupscale-grass

<i>Sagittaria lancifolia</i>	duck potato
<i>Sagittaria latifolia</i>	broadleaf arrowhead
<i>Salix carolina</i>	coastal plain willow
<i>Sambucus canadensis</i> subsp. <i>nigra</i>	American elderberry
<i>Scirpus cubensis</i>	burhead sedge
<i>Scirpus cyperinus</i>	woolgrass
<i>Solidago</i> sp.	goldenrod
<i>Taxodium ascendens</i>	pond cypress
<i>Triadenum virginicum</i>	Virginia marsh St. John's wort
<i>Typha</i> sp.	cattail
<i>Utricularia foliosa</i>	leafy bladderwort
<i>Utricularia biflora</i> (<i>U. gibba</i>)	humped bladderwort
<i>Xyris</i> sp.	yellow-eyed grass

I - Category I Invasive Exotics

II - Category II Invasive Exotics

For additional information about the LVI, please review the Florida Department of Environmental Protection's [LVI Primer document](#).

For additional information about Category I and II invasive exotic plants, please visit the [Florida Exotic Pest Plant Council](#) webpage.

For more detailed information about the above species, please visit the [Atlas of Florida Vascular Plants](#) website.